



THOMAS G. NEWMAN,
EDITOR.

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The Convention at Indianapolis, Ind., was a very pleasant gathering of bee-keepers, and all appeared to have a very enjoyable time. The committee of arrangements had everything about perfect in preparing for the meeting. Messrs. Cutting and Dougherty and Mrs. Cass Robbins deserve much credit for their exertions to make the time a pleasant one. On the evening of the second day, Mrs. Robbins and her lady friends, assisted by Mr. Dougherty, got up an entertainment interspersed with ice-cream and cake, which was very enjoyable, and all the bee-keepers, both male and female, seemed to be well pleased with it. A blind young man by the name of Hansen, performed some very fine instrumental music on the piano, as well as singing several songs. A gentleman recited a poem, entitled "Fesslers Bees," which was very amusing, and produced roars of laughter. Thanks were passed by a "standing" vote to the ladies and their friends for the excellent entertainment provided, which was quite unexpected, but none the less appreciated. We give a report of the first day's sessions in this issue of the BEE JOURNAL, and the others will follow in subsequent issues.

A National Corn Show will be held Nov. 8 to 10, in the Exposition Building, Chicago, in connection with the National Fat-Stock Show. One hundred premiums will be awarded on exhibits of 20 pounds of corn in the ear. Of these, 56 are cash premiums of \$10 and \$5. Competition will be between the growers themselves, in each of the seven principal corn-growing States. Four premiums of \$15 and \$25 are to be awarded as sweepstakes in the competition between the growers of the different States. Most of the express companies co-operate, by offering to carry parcels for exhibition, all distances, over their respective lines at a small, nominal charge of 25 cents if not exceeding 25 pounds, placing distance and near localities on a par. Entries close on Oct. 26. Full particulars supplied on application to the "Secretary of Corn Show," care of Prairie Farmer, Chicago, Ills.

English Honey Markets are very much excited now over the 40 tons brought by the Canadians. A bee-keeper in Surry writes this to the *London Journal of Horticulture* concerning that lot of honey, and the probable result of its sale on the English market :

The exhibit of honey from Canada, which is now on view at the Colonial Exhibition, will be likely to cause alarm to timid bee-keepers who already are dissatisfied, and not without reason, at the small price offered for honey, even though the honey harvest of this year has been much below the average. It is no use trying to shut our eyes to the fact that the sale of this 40 tons of honey will sensibly affect the price of English honey. Still we venture to think that the ultimate result will be to the advantage of English bee-keepers, and for much the same reasons as the late exhibition of the B. B. K. A. has done good in bringing before the public mind the great advantages of honey as food, and the capabilities of our own country for supplying a large amount of honey. At present honey has a very limited sale, and until we can educate the public mind to the fact that it is a necessary food, and not merely a luxury to be indulged in by the few, so long will there be a difficulty in securing honey even at the low price offered by the honey companies and the dealers.

To take a parallel case, we can well remember tasting our first tomato nearly thirty years ago, and thinking how unpleasant it was. For many years after this there was little or no demand for this fruit, but within the last few years the demand for tomatoes has enormously increased, and it is said to be a better paying crop than grapes, and as far as we are concerned we never pass by this fruit, especially in the form of salad.

It would be difficult to point out the reasons for this change, but the fact remains that the consumption of tomatoes is steadily increasing. So with regard to honey, if the public will take it into their heads to use honey in larger quantities than they have done, there will be no difficulty in finding out the real value of honey.

The public press is a very good indicator of public opinion. Though the B. B. K. A. have held several shows in London during the last twelve years, very slight notice was taken of these shows, for bee-keeping was looked upon more as a hobby than an industry. But with regard to the last Show, the press quickly recognized the fact that there was something in bee-keeping, and all the leading papers had editorials on the subject, pointing out the great strides that had been made during the last few years.

At present the supply far exceeds the demand, and, except for sections, there is not much business done in honey, as last year's stocks have not been exhausted. The Canadian exhibit will help to educate the public mind, and when once the demand is established there will be no difficulty as regards the supply either from home or abroad.

This naturally brings us face to face with the question, can we compete with Colonial or foreign bee-keepers? In the *Pall Mall Gazette*, Sept. 17, there is an account of bee-keeping in Ontario, by Mr. Jones, one of the deputation from the Ontario Bee-Keepers Association. He estimates the average honey harvest at £100,000, and the average yield of honey from a colony at 30 pounds, though cases have been known where 100 to 600 pounds have been obtained from one colony in a single season. This, of course, is an enormous yield, and we have never known a colony in Great Britain that could touch this limit, though Mr. Cowan averages 100 pounds from his 14 colonies, and we met a bee-keeper in Wales this summer who had taken 200 pounds from one colony, and still had the Heather honey harvest to increase this yield.

The price of honey in the comb at Ontario is 1s. a pound, while extracted fetches 8d. Taking into account the cost of carriage, commission, etc., these prices are too high for the English market. Last year the wholesale price of good one-pound section honey varied from 6d. to 8d., and extracted from 4d. to 6d. per pound. This year prices have

slightly stiffened, as the harvest has been deficient, but a large bee-keeper offered to supply sections at 6s. per dozen, and said that he could at that price secure a very good profit for himself. Every one knows that the question of carriage is the burning question of the day, as far as farm produce is concerned. Foreign fruit is underselling our home fruit, because the railways give greater facilities for conveying fruit from the continent, and charge less for the freight than they do for fruit from the Kentish orchards, with the result that the farmers are allowing their plums to decay on the trees, as it does not pay to send them to Covent Garden. If the Canadian bee-keepers can get their honey delivered in London at less cost than we can get honey delivered, say from Lancashire, it will be a bad look-out for the British bee-keeper; but though they may be able to undersell us as far as extracted honey is concerned, it will be a more difficult task to drive our section honey out of the market.

The Honey Season in Scotland.—A Lanarkshire bee-keeper writes thus to the *Journal of Horticulture*:

Between Sept. 4 and 13, in this part of Scotland, we had heavy rainfalls, high winds, with an almost sunless sky. One day only during that period the sun shone, and then for a short space of time only. This has been disastrous alike to bees, crops of every kind, and threatening a total destruction in some places to the potato crop. The other day, of potatoes sufficient for a family of four, only one was free from the disease. There has been only one day upon which the drones flew, the result being that only a few late-bred queens are fertilized. I have sufficient for my own use, but some friends must be disappointed. The loss in bees is but a trifle when compared with the crops lying upon the sodden soil caused by exceedingly heavy rains.

The honey of this year here in the north is not only scarcer than that of last year, but is as a rule very much thinner and inferior in quality, most of it being quite subject to the extractor. The above report applies to a wide area, and in many places there is not even a surplus of honey an account of the low temperature. Where my bees stand at the Heather, we had a fall of snow on May 13 that completely buried the skep, and frost and rain have been seldom absent since.

Photographs of 131 of the principal apiculturists of America, all on one sheet, 11x14 inches, were exhibited at the Indianapolis Convention, by Mr. E. O. Tuttle, of Vermont, who has gotten them up, and will soon offer them for sale.

Frank Leslie's Sunday Magazine for November opens with the fourth of Mr. Powell's interesting "Leaves from My Life," dealing with the poet-banker, Samuel Rogers, and the witty Douglas Jerrold. Among the elaborately illustrated articles is one entitled "The Still-vex'd Bermoothes," in which a bright description of the Bermudas is accompanied by twelve scenes from the islands. "Salem, Past and Present," shows us some scenes from the old town of witches, in Massachusetts; and many other interesting articles and fine illustrations. The number is up to the high standard of excellence attained by this magazine.

Money Orders can now be obtained at the Post Offices at reduced rates. Five dollars and under costs now only 5 cents. As these are absolutely safe, it will pay to get them instead of the Postal Notes which are payable to any one who presents them, and are in no way safe.



AND

Replies by Prominent Apiarists.

[It is useless to ask for answers to Queries in this Department in less time than one month. They have to wait their turn, be put in type, and sent in about a dozen at a time to each of those who answer them; get them returned, and then find space for them in the JOURNAL. If you are in a "hurry" for replies, do not ask for them to be inserted here.—ED.]

Transferring Bees, etc.

Query, No. 324.—1. Will bees do as well transferred in the fall on full hives of foundation and fed back honey, or syrup from sugar, to winter, as if transferred early in the season? 2. Is 1,000 square inches of comb large enough for a brood department, and surplus added as needed for honey storing? Here in Texas the winter is merely nominal, only about one month of freezing to kill grass.—D. Texas.

We think your plan will do very well in Texas.—DADANT & SON.

1. I would hardly feel as safe about it. 2. I think so; although I doubt if the mildness of the winter makes less room needed.—C. C. MILLER.

1. In your locality, "yes." 2. It may do in the hands of some, but with my method of management, it would be too small for me.—H. D. CUTTING.

1. It would need repeated trials to show the truth in the matter. In the North I should suppose so much labor late in the season might be an injury. 2. I think not.—A. J. COOK.

1. Yes, if done sufficiently early so that the bees can get things in shape before winter. 2. Yes, unless it is in the spring before swarming time.—W. Z. HUTCHINSON.

1. For this locality I should prefer to do it early in the season, but the proposed plan may work well in Texas. 2. My experience says that it is.—G. M. DOOLITTLE.

1. They will do just as well. But then it should be upon frames of natural comb and not foundation. I transfer hundreds of colonies every fall and winter, and prefer it to the spring. 2. I consider 1,000 square inches of comb not sufficient. I would not want less than 1,500 square inches.—J. P. H. BROWN.

1. I think not, as there would be too little time given for rearing brood, and new comb does not answer as well as old, particularly that in which brood has been reared. 2. Yes, I think so. I winter my bees on from 3 to 7 Langstroth size combs, such combs contain about a square foot of cells on each side. I winter my bees on the summer stands. More stores would be required for successful wintering in a warm than in a cold locality, the reason for this being ob-

vious. So that where only 1,000 square inches is given for brood-nest, considerable surplus should be added.—J. E. POND, JR.

1. I prefer spring to fall transferring, although I have seen each in success. I prefer sugar syrup to any honey for winter stores for bees. 2. I prefer to give colonies breeding room larger than you mention (1,000 square inches of comb) during a portion of the breeding season, and smaller than that during another part of that season. I practice the contraction method with the most gratifying results. This contraction should be governed by locality.—JAMES HEDDON.

1. You may transfer bees at almost any time if you give them proper attention; but spring is the best time, and as you put the question I answer, no. Bees will not build comb or draw out foundation late in the season like they will in the early part of the season. 2. If you mean actual comb surface, 1,000 square inches will answer for brood alone, but in a Southern climate the ten-frame Langstroth hive is none too large, which has comb surface of at least 1,440 square inches.—G. W. DEMAREE.

1. If not too late in the fall I think they would. 2. This is a query of more than usual importance to beekeepers. My opinion is that 1,000 square inches of comb is too large for a swarm, and not large for building up in the spring in working for comb honey. A swarm does best on about 700 square inches of comb, according to the time it issues, and the length of the honey-flow. After much experiment I prefer 750 square inches of comb, allowing the bees to build it from starters 2 inches wide in a shallow reversible frame. For spring management the brood-chamber should be just double the capacity allowed for a swarm, or 1,400 or 1,500 square inches of comb.—G. L. TINKER.

Honey in Drone-Comb for Winter.

Query, No. 325.—I have quite a number of frames of drone comb filled with dark sealed honey. Will they do to put in a hive for winter stores, or had they better be extracted and fed into worker comb? I shall have to use three or more of them for each hive. Will bees cluster on them as well as on worker comb? I mean for them to pass the winter on the drone comb the same as if on worker.—GRANGER, N. Y.

I think I would use them as they are.—C. C. MILLER.

Yes, they are all right provided the honey is of good quality.—H. D. CUTTING.

If you remove them in the spring it will be all right, for they must be replaced by worker comb by the time the bees breed in the spring.—DADANT & SON.

I should use the frames of honey as they are without extracting for winter stores. It does not matter if the comb is drone.—J. P. H. BROWN.

As far as my knowledge goes bees winter as well on drone comb as on worker comb.—G. M. DOOLITTLE.

I know no reason why the bees need not winter as well on drone as on worker comb.—W. Z. HUTCHINSON.

They are just as good for winter. In the spring worker comb should be placed in the centre for brood.—A. J. COOK.

I have used drone combs full of honey for winter stores many a time, but I always have some worker combs between them for the queen to commence brood-rearing in the latter part of the winter. For winter stores they are just as safe as worker combs are.—G. W. DEMAREE.

Put them in as they are. Who ever heard that drone cells were not as well adapted to wintering as worker cells? Thousands of colonies have wintered well with hives replete with drone combs.—JAMES HEDDON.

1. If the honey is well ripened and pure I see no reason why it will not prove safe for winter stores. 2. Bees will cluster as well on drone as on worker comb, but when brood-rearing begins trouble will arise. If worker comb is given early in the spring, perhaps (?) it may come out all right to use the drone now, but I myself should prefer the stores to be in worker comb.—J. E. POND, JR.

They will do just as well on the drone comb for winter, and with some strains of bees, and plenty of worker comb, a large amount of drone comb is not objectionable unless it be for the space it occupies.—G. L. TINKER.

Wintering Bees in the Cellar.

Query, No. 326.—I can put my bees into a cellar the temperature of which does not vary more than two or three degrees throughout the year from 52°. Being unconnected with any building, bees in it would not be disturbed by noises or other outside influences. It is, however, very damp, but can be well ventilated. 1. How will this cellar answer for wintering bees? 2. How much would such a cellar be worth to the man owning 150 to 200 colonies of bees? I have always wintered my bees out-of-doors, heretofore, very successfully.—G. Illinois.

1. Not very well. 2. If we were in your place we would keep on with the wintering that gave you satisfaction.—DADANT & SON.

From the statement I should say it would be all right. How much it would be worth would depend upon circumstances.—H. D. CUTTING.

1. I think it ought to be a good cellar, but I would not pin my faith to any cellar without actual trial. 2. That depends altogether upon circumstances.—C. C. MILLER.

I have never wintered my bees in a cellar, so my opinion would be of no value, as it would be drawn entirely from my reading of the experiments of others.—J. E. POND, JR.

If I could winter bees out-of-doors successfully, I should not bother with the cellar.—G. M. DOOLITTLE.

1. I think it will answer well, but I should be inclined to continue to winter my bees out-of-doors if "very successfully."—W. Z. HUTCHINSON.

If you have wintered your bees successfully on the summer stands, you had better let "success" alone. You might try a few colonies in the cellar, and find out by actual experiment whether you can save in winter stores more than enough to pay for rent of cellar, etc.—G. W. DEMAREE.

1. Yes, that cellar is a good one, and as it maintains so high a temperature, I should care nothing for dampness. 2. You ask how much such a cellar would be worth, but you do not state the size or durability of construction. I consider it very worthy as a bee-repository.—JAMES HEDDON.

I think the temperature of the cellar too high for early winter, but suppose it can be lowered. Bees will not hibernate at 52°, but will remain active and consume too much. If the temperature can be properly regulated, such a cellar would be worth its cost to a bee-keeper having 200 colonies of bees.—G. L. TINKER.

I should prefer a lower temperature—45° Fahr. I have often wondered whether Mr. Barber's cellar is really as warm as he thinks. As he states it I do not see how he keeps it so. Our cellar is always wet, yet it is excellent. Bees have wintered nicely in it with a temperature of about 38°, Fahr., all winter. I should have fears of a cellar at 52°, Fahr. A man who has wintered his bees invariably with success at a temperature of about 45°, thought last winter to improve well enough, as he heard the discussion at Detroit. He warmed up his cellar and lost several colonies, and injured many more.—A. J. COOK.

Convention Notices.

The Wabash County Bee-Keepers' Association will meet at Wabash, Ind., on Oct. 23, 1886.
AARON SINGER, Sec.

The annual meeting of the Western Bee-Keepers' Association will be held in Pythian Hall (11th & Main Sts.), at Kansas City, Mo., on Oct. 27-28, 1886.
P. BALDWIN, Sec.

The next annual meeting of the Michigan State Bee-Keepers' Association will be held in Ypsilanti, Mich., on Dec. 1 and 2, 1886.
H. D. CUTTING, Sec.

The Southern Illinois Bee-Keepers' Association will hold its next meeting at Benton, Ills., on Thursday, Oct. 21, 1886. F. H. KENNEDY, Sec.

The Illinois Central Bee-Keepers' Association will hold its next meeting at Mt. Sterling, Ills., on Nov. 24 and 25, 1886.
J. M. HAMBAUGH, Sec.

All are respectfully invited to attend the next meeting of the Bee-Keepers' Association of Eureka Springs, which will be held at Eureka Springs, Ark., on Oct. 23, 1886. Business of importance to every bee-keeper in Northwest Ark. will be before the meeting.
DR. S. S. PURCELL, Sec.

The next annual meeting of the Nebraska State Bee-Keepers' Association will be held in Lincoln, Nebraska, on Wednesday, Jan. 12, 1887. Location of Hall to be used and Hotel accommodations will be given after further arrangements have been made.
H. N. PATTERSON, Sec.

North American Bee-Keepers' Society.

The 17th annual convention of the North American Bee-Keepers' Society assembled in Pfaffin's Music Hall, in Indianapolis, Ind., at 11 a.m., on Oct. 12, 1886, with the President, H. D. Cutting, and the Secretary, F. L. Dougherty, in their respective positions. About 75 bee-keepers were present at the opening session.

After calling the convention to order, the President introduced the Mayor of Indianapolis, Mr. Caleb S. Denny, who, on account of the absence of Gov. I. P. Gray from the city, delivered the address of welcome both to the State and to the city. The Mayor's address was full of earnest words of welcome to the society, and contained much that indicated his kindly feeling toward this enchanting pursuit, in which so many are engaged. He admired the manner in which bee-keepers endeavored to protect their favorite industry from the attacks of the ignorant and jealous. He wished the society to know that although he himself was not a bee-keeper, yet he felt a deep interest in the cause which they championed, and would do all he could to assist in making it all that bee-keepers desired it should be. After reviewing somewhat the history of the organization of the society, and hoping that the present meeting would be one of the most profitable the society ever held, he again expressed the great pleasure it afforded him, of welcoming the society to the city of Indianapolis for the third time since its organization in Indianapolis on Dec. 21, 1870.

In the absence of Dr. C. C. Miller, who was to express the thanks of the society, President Cutting requested Mr. Thomas G. Newman to make the address, which was substantially as follows:

Mr. President, Ladies, and Gentlemen:— His Honor, the Mayor, has referred to the birth of this International Society at this city 16 years ago, and it will be quite appropriate for me to state that our society is a power in the land, from the fact that it keeps abreast with science and invention in the progress of "to-day"—that its pulse thrills with the transcendent issues of our time—that it is its consecrated task to put into the activity of this age all the great truths of the past and present—as it were, to animate the mighty organism of bee-culture with the soul of the past, and the progressive spirit of the present and future! In this spirit, with this purpose, we meet; in this spirit, with this purpose, let us greet each other; and in this spirit and with this purpose let us part.

We are here to enjoy the social part of our society; to create a good natured rivalry, to debate the subjects that are presented, for we learn "little by little," "here a little and there a little," in the important subjects of the scientific management of bees, marketing and developing the means of selling our crops of honey. Here we possess the grand arena for the

best thoughts and words affecting our pursuit. We bid all a hearty welcome to our discussions, and hope that a flood of light will be the result.

The President remarked that as the minutes of the previous meeting had been published in pamphlet form, all could read them for themselves. He then suggested that a recess of ten minutes be taken, during which time those who desired to become members of the society might do so by giving their names, and \$1 each, to the Secretary. The list is as follows:

HONORARY MEMBERS.

E. Bertrand, Nyon, Switzerland.
Frank H. Cheah, London, England.
Rev. Wm. F. Clarke, Guelph, Ont.
Prof. C. V. Riley, Washington, D. C.
Hon. — Ross, Ontario, Canada.
Hon. Edwin E. Willets, Lansing, Mich.

LIFE MEMBERS.

D. A. Jones, Beeton, Ont.
Thomas G. Newman, Chicago, Ills.

MEMBERS.

T. S. Bell, Valparaiso, Ind.
Dr. J. A. Minich, Indianapolis, Ind.
C. P. Dadant, Hamilton, Ills.
E. C. Hubbard, Water Valley, N. Y.
Geo. F. Robbins, Mechanicsburg, Ills.
L. Dawson, Champaign, Ills.
Geo. Kirkpatrick, New Paris, O.
T. H. Kloer, Terre Haute, Ind.
H. Chapman, Versailles, N. Y.
Layton Hawkins, Bridgeport, Ind.
E. T. Jordan, Harmony, Ind.
John Nelsel, High Hill, Mo.
Jno. T. Dinsmore, New Brunswick, Ind.
E. W. Crist, Crawfordsville, Ind.
D. N. Coffin, Westland, Ind.
H. N. Hockett, Jonesboro, Ind.
Andrew Dunlap, Terre Haute, Ind.
G. W. Sedmon, Paris, Ills.
Burr Roye, Herbst, Ind.
J. A. Reeds, Hindsboro, Ills.
W. S. Pouder, Groesbeck, O.
E. O. Tuttle, Bristol, Vt.
Mrs. J. H. Lowden, Bloomington, Ind.
Mrs. Ellen Bryner, Indianapolis, Ind.
Mrs. F. M. Cooper, Muncie, Ind.
Eli Smith, Lebanon, Ind.
W. S. Hart, Hawk's Park, Fla.
W. T. F. Petty & Son, Pittsburgh, Ills.
J. N. McFeran, Brownsville, Ind.
B. T. Baldwin, Marion, Ind.
Chas. Hill, Mt. Healthy, O.
J. F. Michael, German, O.
E. H. Collins, Mattville, Ind.
Geo. W. York, Chicago, Ills.
J. W. McKinney, Camargo, Ills.
E. Whittlesey, Pecatonica, Ills.
Lewis Hockett, Fairmount, Ind.
Enoch Babb, Herbst, Ind.
T. Halman, Terre Haute, Ind.
J. C. Zimmerman, Wabash, Ind.
L. Highbarger, Adelton, Ills.
F. J. Siebert, Cincinnati, O.
A. M. Gander, Adrian, Mich.
T. W. Abbott, Noblesville, Ind.
T. L. Von Dorn, Omaha, Neb.
H. D. Cutting, Clinton, Mich.
Jno. M. Pearson, Tippecanoe City, O.
W. L. Jobe, Fillmore, Ind.
W. Mason, Fillmore, Ind.
Chas. F. Muth, Cincinnati, O.
G. W. Brodbeck, Indianapolis, Ind.
F. L. Dougherty, Indianapolis, Ind.
David Leaming, Arcadia, Ind.
Mrs. A. Cox, Whitelick, Ind.
T. F. Bingham, Abronia, Mich.
Aaron Benedict, Bennington, O.
Prof. N. W. McLain, Aurora, Ills.
T. P. Andrews, Farina, Ills.
Sylvester Johnson, Irvington, Ind.
Mrs. C. Robbins, Indianapolis, Ind.
James Fornbrook, Watertown, Wis.
G. S. Mann, Preston, O.
D. C. Smith, Lewisville, Ind.
Dr. C. C. Miller, Marengo, Ills.
M. G. Reynolds, Williamsburg, Ind.
A. J. Root, Medina, O.
B. J. Miller, Nappanee, Ind.
Samuel King, Jr., New Paris, O.
I. N. Cotton, Traders Point, Ind.
Mrs. W. N. Voorhees, Indianapolis, Ind.
Mrs. Adell Crandall, New Berlin, Ills.
N. N. Betzinger, Marcellus, N. Y.
E. S. Armstrong, Jerseyville, Ills.
W. Z. Hutchinson, Roserville, Mich.
Ora Knutson, New Brunswick, Ind.
R. L. Taylor, Lapeer, Mich.
J. W. Sean, Harrodsburg, Ind.
J. J. Martin, North Manchester, Ind.
L. Murphy, Terre Haute, Ind.
F. S. Comstock, North Manchester, Ind.
A. T. Kelly, Franklin, Ind.
W. O. Titus, Toledo, O.
Jones Scholl, Lyons' Station, Ind.
S. H. Lane, Lebanon, Ind.
J. F. Coffin, Westland, Ind.
D. C. Denpree, Edenburg, Ind.
Solomon Hathaway, Muncie, Ind.
J. R. McConnell, Needham, Ind.

After the short intermission the convention was again called to order, and the President appointed the following committees:

Finance.—C. P. Dadant and Prof. N. W. McLain.

Resolutions.—R. L. Taylor, T. L. Von Dorn, and Mrs. C. Robbins.

Exhibits.—C. F. Muth, Frank L. Dougherty, and E. O. Tuttle.

Printing.—Rev. W. F. Clarke, W. Z. Hutchinson, and Dr. A. B. Mason.

The convention then adjourned until 2:30 p.m.

AFTERNOON SESSION.

At 2:30 p.m. the convention was called to order by President Cutting, after which he delivered the

PRESIDENT'S ANNUAL ADDRESS.

Bee-Keepers of North America.—It is a pleasure to meet so many earnest workers here to-day, and we should be thankful to the Giver of all good, that we are permitted to again meet our many friends. While we miss many familiar faces at this meeting, and learn of the misfortunes that keep many away, we have every assurance that they are with us in mind, if not in body.

We who have been permitted to meet here to-day, have many things to be thankful for. Your committee of arrangements have been untiring in their efforts to make it pleasant for you all, and give you a hearty welcome. Our Corresponding Secretary, Mrs. Robbins, will long be remembered by those assembled here, for the beautiful badges which she has provided you, and may you ever preserve them as a memento of this happy meeting.

No cloud of discord darkens our horizon, and to-day the North American Bee-Keepers' Society is in a position where great good can be accomplished. During the past year I have often thought of "what could be done that would be of material benefit to this society." I would like to see this society publish each year a volume of at least 300 pages, containing the best writings of our many contributors. If we, as a society, could do this, we would soon march onward from our 125 members to as many thousands; it would add greatly to our standing and usefulness at home and abroad. To do this would require a secretary of good executive ability, and he would have to be paid a stated salary for his services. Many of our State horticultural societies are conducted on this plan. Michigan, each year, issues a volume of from 400 to 600 pages. The printing is done by an appropriation from the State, but the entire work is compiled by the efficient Secretary, Chas. W. Garfield. This is only the work of one State, while ours would be the work of an International Society, adding very much to its usefulness and importance.

I can see where our bee-periodicals and publications of kindred character can be of great use to this society on this point. I feel that each and every one of them would extend to this society every courtesy possible, and become identified in this work.

Right here let me thank, yes heartily thank, our fraternal publishers for the many courtesies extended to this society, not only the past year, but for many years, for their great help in publishing all of our notices and proceedings without any expense to this society. If you will excuse me, I must make mention of one case in particular. At the meeting of this society last year, at Detroit, Thomas. G. Newman, editor and publisher of the AMERICAN BEE JOURNAL, with his usual liberality, offered to publish in pamphlet form the proceedings of that meeting, to which he added a brief history of this society up to and including the Detroit meeting. It would be useless for me to tell you of the usefulness of this work; to me the past year it has been my *Vade Mecum*. Upon the completion of this work the executive committee purchased 200 copies, and the Secretary mailed to each member and others a copy.

Mr. Newman then presented to this society, through its President, 50 copies to be used where it was thought they would do the most good. Your chairman has sent a copy to every Agricultural College in the States and Canada, where he could obtain the required address; also to many of our horticultural and agricultural societies and papers. I cannot speak in too much praise of the noble example of our good Brother Newman, and I earnestly recommend that this society, before the close of this convention, tender to Brother Newman many thanks for his kindness and liberality.

I cannot close without again calling your attention to this matter of publication. Such articles as are published in the AMERICAN BEE JOURNAL for this year, page 261, entitled, "Medicinal Properties of Honey," by Dr. G. P. Hachenberg, Austin, Texas; also an article on page 262, "Opposition to Bee-Keeping," by C. G. Beitel, Easton, Pa., should be read by every apiarist in North America. The dissemination of knowledge regarding our pursuit must place every legitimate bee-keeper on a higher plane, and bring our industry to the front, and place it side by side with other recognized pursuits.

I would respectfully urge upon the Vice-Presidents of this society the necessity of corresponding with the secretaries of their respective State agricultural societies and submit to them a premium list for bees and honey and necessary appliances. The Michigan State Agricultural Society gives, by way of encouragement to a growing industry, a premium list amounting to \$300, the largest of any State that I have any knowledge of. After giving this matter close and careful attention for several years, I am fully convinced that we can do much good to an over-burdened market by making judicious exhibits of our products. The State and County fairs held by the different societies are great helps in this direction. I do not believe in "one idea exhibi-

tions," so I will leave it with our energetic and intelligent fraternity how those exhibitions should be made to accomplish the greatest good. Many thanks are due to those who, being unable to attend the different exhibitions, have contributed articles of interest for exhibition.

I sometimes think many of us do not fully understand or realize the importance of a Bee-Keepers' Union. I look for some action on the part of its managers at this meeting, that will properly place the Union before the members of this society, that they may fully understand its objects and requirements.

You will soon be called upon to elect officers for another year; on retiring, allow me to thank you for the many courtesies extended to me as your presiding officer.

Mr. Thos. G. Newman moved that the address of the President be referred to a committee of three for consideration, and to report upon the advisability of the adoption of the many recommendations therein made. This was adopted, and Dr. C. C. Miller, A. I. Root, and C. F. Muth were appointed such committee.

The next essay on the programme was "Bee-Studies," by Prof. A. J. Cook; but he was not present, and as the subject required many illustrations, he declined to send it.

The following is the essay of Mr. Jno. Aspinwall, of Barrytown, N. Y.,

APICULTURAL JOURNALISM.

A great factor in the business of bee-keeping is the source of knowledge by and through which we acquire the ability to successfully carry on this most interesting pursuit, a pursuit which requires all the nerve, the perseverance and skill a man can bring to bear upon it. Those who have not tried it may say, "My friend, you seem to think a bee-keeper must possess unusual powers of mind and skill of body, and that he must couple these to a bodily control which savors of higher things than mere bee-keeping."

"Yes," I say, "a successful bee-keeper is a very skillful man, both in mind and body."

"Well, my friend, where does he acquire his knowledge and skill?" says he.

"First in books and periodicals for theoretical knowledge, then with a bee-keeper or alone in an apiary for the practical skill," I answer.

Who can gainsay that our bee-keeping periodicals have not played a most important role in the development of bee-keeping in America, where the pursuit stands ahead of all the world?

I do not propose to enter here into a history of apicultural journalism, for there are present those who know more regarding that subject in five minutes than I do in a week, but I simply desire to present to you some of the effects produced by our periodicals, and also humbly advance my views as to the standard to which our bee-literature should attain. Two essentially different classes of work have been performed by them. First,

disseminating the knowledge acquired by many minds through years of toil and close observation; second, by advertising those implements which are the outgrowth of that study and observation.

Bee-books are all very well in their way, but the bee-keeper wants more than that, he wants new ideas. Perhaps the methods set forth in the book he has, may not suit his particular locality, but by-and-by there will come in his bee-paper, an article from some close observer and skillful apiarist that will just "hit the nail on the head." We have almost all been through just such an experience, I think.

America stands ahead of all the world in bee-keeping. Look at her array of bee-papers! It is greater than all the rest of the world combined—two weeklies, one semi-monthly, and three monthlies, to say nothing of numerous other periodicals that combine bee-keeping with something else. To say that we have a greater number of apicultural papers, and to say we are in advance of all the world in our art, means one and the same thing. Now comes the question, "What should a bee-publication be like?" Well, first of all it should not be run by or in the interest of a clique or ring, but should be governed entirely by the interests of two parties, first, the subscriber, and second, the publisher. It would be desirable not to have it connected in any manner with the supply business, but experience has proved that there is not sufficient profit in a publication alone. The writer has still a vivid recollection of the scene at the Northeastern Convention at Syracuse, some three years or so ago, when the *American Apiculturist* was put up as the official organ of that body, because it was not backed up by a supply business, and consequently said to be run in the interest of bee-keepers; how your humble servant claimed that the *Bee-Keepers' Magazine*, as well as *Gleanings*, were in their interests, though connected with the supply business, and that the day would come when all bee-papers would be backed up by a supply-business; how, when he made this prediction, they poured upon his head the vial of their wrath and ridicule. But oh, he had a sweet revenge, for to-day every bee-paper in this country is connected directly with supplies.

Great care should be used by the editors to see that they do not allow this feature to make them prejudiced. Controversies should be confined to something besides personalities.

I firmly believe the day will come when we will discard this "brother" business. It is not manly, and half the time it is absolutely hypocritical. Bee-keeping is not a *play* business, it is a legitimate industry, and it would be as ridiculous for our horticulturists, agriculturists, and stock growers, to "brother" themselves through the press as it is for us to do it.

I believe that publishing extracts from other bee-papers a capital feature, and I believe a very successful bee-publication could be conducted by

having only two departments, viz: clippings for one, and questions and answers for the other; for in the first, by careful selections you get the cream of all the bee-literature in the country, and in the second, information can be gained on particular cases. Original matter is first-rate very often, but a good deal we read, or rather glance at, is of no interest except to the writer, and he knew all about it before he wrote it. I would beg you to have charity for one who deliberately sets up his opinion before so many older and wiser heads, but I offer an excuse, viz: that apicultural journalism is a subject in which I am intensely interested and I think I see the day not far off when our industry will receive the consideration which its importance so justly deserves—and why should I not be interested?

What has apicultural journalism done in this country besides instructing bee-men? It has done what was supposed to be an absolute impossibility—it compelled probably one of the largest, if not the largest honey-house in the world from continuing the nefarious practice of honey adulteration—a house from which the practices of honey adulteration spread throughout the land, and yet one, yes, gentlemen, only one bee-keeping monthly stood up and made that fight, and it fought until to-day in the pages of that magazine you can see how the practice has been stopped—that they will never more spoil our industry, by putting vile glucose upon the market in contact with honey. Who dare say that the bee-keeping press has no power?

Gentlemen, I am proud of being connected with the magazine that fought that good fight, namely, the *Bee-Keepers' Magazine*. Do you not know that another bee-paper, the oldest journal of the kind in the land, the good old *AMERICAN BEE JOURNAL*, has worked to such a good purpose that at present there are joined together in close union a set of determined men who will not see our industry trampled upon, who will fight every just claim to the end, and what is more, will see justice meted out as it should be? Do you now dare say that apicultural journalism has no influence and strength? No, I say; there is power, there is strength in our magazines and journals, and may God grant it shall never be turned to any evil purpose.

Mr. Thomas G. Newman then read the following essay, entitled,

BEE-LITERATURE.

This subject was assigned to me, without stating whether it was to be treated historically or otherwise, but I presume it was intended that I should get down to dry facts, and give a condensed history of bee-literature. The subject will very naturally be very monotonous, and if you go to sleep over it, I can console you with the thought that it has taken many hours from my sleep to dig out the brief history here presented, and if you catch the sleep which I had to

forego to prepare this essay, you are welcome to it.

Ages before the creation of man on this planet, the flowering plants demanded insect fertilization, and doubtless the bee was there to scatter the pollen masses, fertilize the flowers and gather the honey. Then there were no sheep-bee lawsuits, nor controversies concerning bees and grapes. These "luxuries" are a modern invention, and belong to the nineteenth century.

The writers of the Bible tell us of the early races of bees, and describe the "land flowing with milk and honey." The records of the Egyptians and the Chinese, cut in stone, show that bees were known to them as faithful servants that gathered the sweets of the earth for their use. Three hundred years before the Christian era, Aristotle affirmed that the bee was "a magazine of all the virtues," and Virgil, the noted Latin poet, calls it "a ray of divinity." Shakespeare and Milton devoted to it their thoughts and words of praise.

It was estimated, over three hundred years ago, by De Montfort, who then wrote a work on bees in French, that between 500 and 600 authors had preceded him on the subject of bee-keeping. Most of the books were written in Latin, and are lost to the world; and but few have been handed down to us.

I will briefly enumerate some of the books on bees and bee-culture published in the English language:

Charles Butler, at Oxford, in A. D. 1609, gave to the world an octavo work entitled, "The Feminine Monarchie; or the Historie of Bees, and the Right Ordering of Them." The second edition of this work, a quarto, was published in London, in 1623.

In 1623, at London, was published "The Husbandry of Bees, with their Several Uses and Annoyances," by Wm. Lawson.

In 1630, John Levett's 8vo was published in London, and the title was "The Ordering of Bees."

In 1637, in London, was published Richard Remnant's quarto, entitled "The History of Bees."

In 1655, the "Reformed Commonwealth of Bees," by Samuel Hartlib, appeared in London, in quarto form.

In 1657, a quarto appeared in London by the Rev. Samuel Purchas, with this imposing title: "A Theater of Political Flying Insects: wherein especially the nature, the worth, the work, the wonder and the manner of right-ordering of the bee is discovered and described. Together with discourses historical, and observations physical, concerning them."

In 1675, John Gedde's 8vo appeared in London, entitled "Method of Bee-Houses and Colonies," and in 1721 his work entitled "The English Apiary; a Complete Bee-Master" was published, also an 8vo, and published at the same place.

Joseph Worden wrote a book which was also published in London, with plates, 8vo, in 1676, and its title read thus: "Apiarium, or a Discourse of Bees: tending to the best way of improving them, and to the fallacies

that are imposed by some for private lucre on the credulous lovers and admirers of these insects." In 1680, another 8vo appeared in London, by the same author, entitled "A Further Discovery of Bees."

In 1691 a 12mo was published in London, written by John Worlidge, entitled "Apianum; or a Discourse of the Government and Ordering of Bees; their Nature and Properties."

Two years later, in 1693, appeared a quarto, in London, by Edmund Southerne, bearing this title: "A Treatise Concerning the Right Use and Ordering of Bees: Newlie made and set forth according to the author's own experience: which by any heretofore hath not been done." Mr. Southerne appeared to think that he was the first author on bees who had written out his experience. This closes the list for the seventeenth century.

The authors on bee-keeping in the eighteenth century begin with Joseph Warder. At London, in 1712, his 18mo, consisting of 166 pages, was given to the world, and its title read thus: "The True Amazons; or, The Monarchy of Bees: Being a new discovery and improvement of those wonderful creatures. With directions 'plain and easy how to manage them, both in straw hives and transparent boxes; so that with laying out of but £4 or £5, in three or four years, if the summers are kind, you may get £30 or £40 per annum.'" This work was the first to contemplate bee-culture as a business, and as a result nine editions were published; the last of which appeared at London in 1765.

Then came an 8vo of more imposing proportions; containing 468 pages, and being illustrated with twelve copper plate engravings. It was by R. A. F. Reaumur, and was translated from the French by N. Bazin, and published in London in 1744. Its title reads thus: "The Natural History of Bees: containing an account of their production, their economy, the manner of their making wax and honey, and the best methods for the improvement and preservation of them." As a scientific work, this is still held in high repute.

In the same year, 1744, an 8vo was published, with copper-plate engravings, containing 208 pages, by the Rev. John Thorley. It was a plea for the bees, and condemned the brimstone pit, as is shown by its title, which was as follows: "Melissologia; or, The Female Monarchy: Being an inquiry into the nature, order and government of bees, those admirable, instructive and useful insects. With a new, easy and effectual method to preserve them, not only in colonies, but common hives, from that cruel death to which their ignorant, injurious and most ingrateful owners so commonly condemn them. A secret unknown to past ages, and now published for the benefit of mankind. Written upon forty years' observation and experience." A second edition of this work was published in 1765.

In 1750, at Edinburgh, "The Practical Bee-Master, by Robert Maxwell, was published: 12mo; 138 pages.

In the same year as Mr. Thorley's second edition came out, another progressive step was pointed out by Stephen White, in the manner of taking the honey in bee-boxes, etc. That was an 8vo, and was published in London in 1756, and its title reads thus: "Collateral Bee-Boxes: or a new, easy and advantageous method of managing bees, in which part of the honey is taken away in an easy manner, without destroying or much disturbing the bees; early swarms, if desired, are encouraged, and late ones prevented."

In 1758, the noted work of John Swammerdam, M. D., was published in London, entitled, "The Book of Nature; or, The History of Insects: It was translated from the Dutch and Latin, by Thomas Floyd. Seventy-eight pages of this elaborate folio, and ten copper-plate engravings are given to 'Treatise of Bees; or, an accurate description of their origin, generation, sex, economy, labors and use.' This is a standard work, and is much quoted by all modern authors.

John Mills, F.R.S., wrote a work of 158 8vo pages, which was published in London in 1766. Its title was: "An Essay on the Management of Bees: wherein is shown...that the practice of saving their lives when their honey and wax are taken from them was known to the ancients, and is, in itself, simple and easily executed."

In 1768, a quarto appeared in London containing 176 pages, with copper-plate engravings. It was the celebrated work of Thomas Wildman, entitled: "A Treatise on the Management of Bees: wherein is contained the natural history of those insects; with the various methods of cultivating them, both ancient and modern, and the improved treatment of them." A second edition was published in 1779.

"A Complete Guide to the Mystery and Management of Bees" was the title of an 8vo by William White, published in London in 1771.

In 1777 was published in London an octavo, written by John Debray, entitled "Discoveries on the Sex of Bees: explaining the manner in which their species is propagated; with an account of the utilities that may be derived from these discoveries by their application to practice."

Then comes the works of John Keyes, the first of which was an 8vo, and was published in London in 1780, entitled: "The Practical Bee-Master: in which is shown how to manage bees, either in straw hives or in boxes, without destroying them, and with more ease, safety and profit than by any method hitherto made public." The next was a 12mo of 272 pages published in 1796, and was entitled, "The Ancient Bee-Master's Farewell: or full and plain directions for the management of bees to the greatest advantage; declaring further improvements, etc." In 1814 another was issued, which was but little more than a re-print of the last-named, though its title read, "A Treatise on the Breeding and Management of Bees to the Greatest Advantage." This was a 12mo, and contained 272 pages.

In 1783 an octavo was issued, written by Bryan J. Bromwich, entitled, "The Experienced Bee-Keeper: an essay on the management of bees."

In 1795 an 8vo was published in London; the author being James Bonner, and its title was, "A Plan for Speedily Increasing the Number of Bee-Hives in Scotland."

In 1799, a 12mo was issued in London, written by John Isaac, entitled "The General Apiarian: wherein a simple, humane, and advantageous method of obtaining the produce of the bees, without destroying them, is pointed out."

This completes the eighteenth century. The nineteenth is commenced by an anonymous publication in London of an 8vo, entitled "Comfort to Aristaeus: or a few useful hints on the management of bees, so as to render honey and wax a cheap and plentiful commodity, etc."

Then came, in 1806, the famous work of Francis Huber, published in London, 12mo, and entitled: "New Observations on the History of Bees," which was translated from the French.

From 1806 to 1813 a poem in 3 parts, 297 pages, was published at Shrewsbury, entitled, "The Bees."

This was followed, in 1815, by a book of 395 pages, by Robert Huish, and published in London, entitled, "A Treatise on the Nature, Economy and Practical Management of Bees, in which the various systems of apiculturists are examined, etc." In 1844 another edition was published containing 458 pages.

In 1821, at London, was published an anonymous poem, entitled "Monarchy of Bees;" 29 pages, 12mo.

In 1825, a 12mo of 112 pages entitled "The Practical Apiarian," by George Strutt, was published.

In 1827, at Edinburgh, was published an 8vo, entitled "Apiarians' Manual," by T. M. Howatson.

In 1827, "The Honey-Bee: its Natural History, Physiology and Management" made its appearance in London. It was by Edward Bevan, and the first edition contained 404 pages. Another edition was published in 1838.

In Boston, Mass., was issued a 12mo in 1829, of 164 pages by James Thacher, M. D., entitled, "A Practical Treatise on the Management of Bees: with the best method of destroying and preventing the depredations of the bee-moth."

And in the same place in 1831, was published an 18mo of 106 pages, by Jerome V. Smith, M. D., entitled, "An Essay on the Practicability of Cultivating the Honey-Bee in Maritime Towns and Cities."

In 1833, at London, a 12mo of 71 pages appeared, entitled, "The Apiarian's Guide," by J. H. Payne.

In the next year, 1834, appeared in London a 12mo with 40 wood cuts, entitled "The Management of Bees," with a description of the "Ladies' Safety Hive," by Samuel Bagster, Jr.

In 1835, in New York, was published a small pamphlet by Francis Kelsey, entitled "A Practical Tre-

tie on the Management of Honey-Bees."

In the same year, Thomas Nutt issued a 12mo in Wisbech, of 269 pages, the sixth edition of which was published in London in 1846, consisting of 340 pages, entitled, "Humanity to Honey-Bees: or practical directions for the management of Honey-Bees upon an improved humane plan, by which the lives of bees may be preserved, etc."

Then in 1839 came "The Cottager's Bee-Book" by Richard Smith.

In 1840, in Boston, Mass., an 18mo of 128 pages, was issued by John M. Weeks, entitled "A Manual: or an easy method of managing bees, with infallible rules to prevent their destruction by the moth."

In the same year a pamphlet of 48 pages was issued in New Haven, by Wm. M. Hall.

And James Duncan, in Edinburgh, in the same year wrote a book entitled "The Natural History of Bees."

In 1842, J. Wighton issued a 12mo in London, under the title of "The History and Management of Bees."

W. C. Cotton, in 1842, issued an 8vo with plates, called "My Bee-Book," and in 1843 a 12mo, "Two Letters on Bees."

In 1842, at London, was published from the *Quarterly Review* a pamphlet of 53 pages on "Bees and Bee-Books."

"The Practical Bee-Keeper," an 8vo was issued in 1843 by J. Milton; and in the same year in Edinburgh, W. Dunbar, issued a 12mo entitled "Bees."

In 1846 Thomas R. Allen published in Syracuse, issued the "Bee-Cultivator."

In 1850, H. Taylor issued his "Bee-Keepers' Manual," 126 pages.

Then followed W. A. Munn's "Bar and Frame Bee-Hive Described."

In 1845, at London, was published a 12mo, entitled "Bee-Keepers' Manual" by D. Chylinski.

In 1847 a pamphlet of 103 pages was published at Dublin, entitled "The Hive and Honey-Bee," by H. D. Richardson, with engravings.

In 1848 E. Scudamore issued a 12mo in London, entitled "Artificial Swarming of Bees."

In 1848, at New York, a book of 162 pages was published, entitled, "Practical Treatise on Humanity to Honey-Bees," by Edward Townley.

Then in London in 1848, appeared a 2mo without name, entitled, "Hand-Book on the Honey-Bee."

In 1848, at London, was published "Golding's Shilling Bee-Book," 68 pages.

In New York, T. B. Miner published "The American Bee-Keepers' Manual" in 1849, consisting of 349 pages, and in 1851 his pamphlet appeared, entitled, "An Essay on the Winter Management of Bees."

In 1851 an anonymous publication was issued in Philadelphia, of 126 pages, entitled "The Hive and its Wonders," and another in New York, of 119 pages, entitled "The Cottage Bee-keeper," by a country curate.

And in 1852 an anonymous 8vo "The Honey-Bee," appeared in London.

The Rev. L. L. Langstroth, in 1853, published a 12mo of 384 pages in Northampton, entitled "The Hive and Honey-Bee;" and the second edition was published in New York, in 1857, consisting of 534 pages.

In 1853, in New York, was published a 12mo, consisting of 376 pages, by M. Quinby, entitled "The Mysteries of Bee-Keeping Explained; being a complete analysis of the whole subject." A new edition entitled "Quinby's New Bee-Keeping," was published in 1880.

The same year (1853), the Rev. J. G. Wood issued an illustrated 12mo of 114 pages, in London, entitled "Bees: their habits, management and treatment."

In 1854, Henry Eddy issued in Boston a 12mo of 60 pages entitled "Eddy on Bee-Culture and the Protective Bee-Hive."

In 1855, in New York, was published "The Bee-Keepers' Chart," by E. W. Phelps.

In 1856, in London, a 12mo of 112 pages was published, "The Bees and White Ants; their Manners and Habits;" with illustrations of animal instinct and intelligence. From the Museum of Science and Art; with 135 illustrations, by D. Lardner, D.C.L.

"The Bee-Keepers' Text Book," by H. A. King, was published in New York in 1860, in English and German, and passed through many editions.

In 1861 a book of 440 pages was published in San Francisco, Calif., with 80 illustrations, entitled "The Bee-Keepers' Directory; or the Theory and Practice of Bee-Culture in all its Departments," by J. S. Harbison.

In 1865 "The Apiary; or, Bees, Bee-Hives and Bee-Culture," by Alfred Neighbour, was published in London. It contained 350 pages, and was extensively illustrated.

In 1867, at Buffalo, N. Y., was published a pamphlet of 64 pages, on "The Triangular Bee-Hive and Practical System of Bee-Keeping," by T. F. Bingham.

Quite a number of small pamphlets were issued about this time, to illustrate some hive or invention, but our space forbids their enumeration.

In 1870, at Edinburgh, a 12mo of 193 pages was published, entitled "Handy-Book of Bees," by A. Pettigrew.

In 1870, "Annals of Bee-Culture," by D. L. Adair, was published.

In 1872, E. Kretschmer, of Coburgh, Iowa, published a book of 250 pages, entitled "The Bee-Keepers' Guide."

In 1873, at Mt. Gilead, O., was published a pamphlet of 128 pages, entitled "The Honey-Bee; its habits, culture, and management," by Aaron Benedict.

In 1875, the "North American Bee-Keepers' Guide," by J. M. Hicks, containing 104 pages, was published at La Fayette, Ind.

In 1875 John Hunter, of London, England, published a 12mo "Manual of Bee-Keeping," which, in 1879, was enlarged to 218 pages in the third edition.

In 1876, at Chicago, Ills., was published a translation of "The Dzierzon Theory, as set forth by the Baron of Berlepsch," 48 pages.

In 1876, a 50-page pamphlet was published at Appleton, Wis., entitled, "Fifty Years of Bee-Keeping," by A. H. Hart.

In 1876 Prof. A. J. Cook published a pamphlet called "The Manual of the Apiary," which, in 1878, reached its second edition with 286 pages, and 112 illustrations, and was published in Chicago.

In 1877, at Medina, O., was published a large 8vo of about 300 pages, entitled "A B C of Bee-Culture," by A. I. Root. It was nicely illustrated, and has passed through many editions.

In 1878 appeared a 12mo in New York, entitled "The Blessed Bees," by John Allen; 178 pages.

In 1878, a 32-page pamphlet was published at Chicago, Ills., entitled "Honey as Food and Medicine," by Thomas G. Newman, in both English and German.

In 1879 a pamphlet of 80 pages, entitled "Bee-Culture," was published in Chicago, both in English and German, by Thomas G. Newman, and in 1880, a second edition, enlarged to 200 pages, and entitled "Bees and Honey or Management of an Apiary for Pleasure and Profit" was published.

In 1881, "The British Bee-Keepers' Guide Book" of 136 pages, by T. W. Cowan, was published in London.

In 1881, at London, appeared an anonymous pamphlet of 80 pages, entitled "Modern Bee-Keeping; a handbook for cottagers."

In 1881, at Chicago, Ills., was published "The Hive I Use," by G. M. Doolittle, describing his management of bees.

In 1881, at Cincinnati, O., was published a 24mo of 36 pages, entitled "Practical Hints to Bee-Keepers," by C. F. Muth.

In 1881, at Hamilton, Ills., was published a 24-page 8vo, entitled "Extracted Honey; Harvesting, Handling and Marketing," by Dadant & Son.

In 1882, at Youngstown, O., was published by A. R. Kohnke, a 14-page 12mo, entitled "Foul Brood; its Origin, Development, and Cure."

In 1882 Sir John Lubbock's 12mo of 448 pages was published in London, entitled "Ants, Bees and Wasps," giving many experiments with bees.

In 1882, in Salem, Mass., was published an 8vo, entitled "The Bee-Keepers' Handy Book," by Henry Alley; 270 pages.

In 1883, in London, a 12mo was published, entitled "Dzierzon's Rational Bee-Keeping." It is a translation of his German work, with notes by C. N. Abbott.

In 1884, at Chicago, Ills., was published a 30-page 12mo, entitled "The Cause and Cure of Foul Brood (or Bacillus Alvei), by Frank Cheshire.

In 1884, the Rev. George Raynor, M. A., published in London a 24-page pamphlet, entitled "The Ligurian Queen-Bee; her introduction to alien stocks, and the best means of pure propagation."

In 1884, at New Concord, O., was issued a book of 172 pages, entitled, "Bees for Pleasure and Profit," by Rev. Wm. Ballantine.

In 1884, was published at New York, a "Dictionary of Practical Apiculture," by John Phin. It contains 80 pages.

In 1885, at Dowagiac, Mich., an 8vo pamphlet of 128 pages was published, entitled "Success in Bee-Culture, as Practiced and Advised," by James Heddon.

In 1885 "The Australasian Bee-Manual" was published in Matamata, New Zealand, by Isaac Hopkins. It is an 8vo, and contains 336 pages, and is illustrated.

In 1886 a 16mo of 114 pages was published in Chicago, Ills., entitled "A Year Among the Bees," by Dr. C. C. Miller.

In 1886, at London, appeared a 64-page 12mo, entitled "Simmins' Original Non-Swarming System."

In 1886, at Mt. Vernon, Iowa, was published a 12mo of 16 pages, entitled, "How to Raise Comb Honey," by O. Foster.

In 1886, at New York, was issued a 12mo of 134 pages, entitled, "Buz, or the Life and Adventures of a Honey-Bee," by Maurice Noel—a Novlette.

In 1886, at Beeton, Ont., appeared a poem by the Rev. W. F. Clarke, entitled "A Bird's-Eye View of Bee-Keeping." It contains 60 pages, and is all in rhyme.

In 1886, was issued the first volume of a 12mo, entitled, "Bees and Bee-Keeping," by Frank Cheshire, F.L.S., London, England. It contains 336 pages.

In the line of periodicals devoted to bee-culture, there is quite enough for another essay, and as this is already too long, even though condensed as much as possible, let the Periodical Literature be a subject for another time.

The books enumerated do but represent "mile-stones" upon the highway to progress towards the goal to which we are all journeying; and in mentioning them, we are reminded that we are only a "small detachment" in the grand army of apiculturists the world over. In the French, Italian, German and Russian languages many more books have been published than in the English language. They are all workers in the same enchanting pursuit.

Dr. C. C. Miller moved that a vote of thanks be accorded Mr. Newman for his valuable essay. Adopted with applause.

Mr. C. F. Muth then followed with his essay on

SUCCESS IN BEE-CULTURE.

Success in life is our object-lesson from childhood. We were taught to be industrious, saving, persevering, and prudent in order to accomplish the object. It is not my intention to-day to give you any essay on success in life nor success in business, as these are matters which are not only taught, but lay within us to a great extent, and are often determined by surrounding circumstances, and our individual sagacity, of making use of them. My object to-day is to give you my own manner of manipulating

an apiary by which the largest crop of honey may be produced with the least expense and the least loss of time.

I have kept bees for the last thirty years or more, and the average number of colonies I commenced each season with, for the last 25 years, was between 45 and 50. Being in the mercantile business I had the chance, almost every spring, of selling all the bees I meant to dispose of, which I did. My wintering during all this time was as successful as that of the best of my neighbors, and none of them produced larger crops of honey in proportion. I should have, therefore, an idea of bee-keeping, if I am no specialist.

A successful wintering of the bees is one of the foremost requirements of the coming crop. The subject having been discussed by a number of able writers, I shall not dwell upon it now, but will state that success depends upon a strong healthy colony in the fall, plenty of honey and dry comfortable quarters. Honey and pollen are the natural food of the bee, and the most wholesome, unless our negligence or ignorance causes them to decompose, and when, then, they act as a poison, we should blame ourselves only.

We know that the strongest colonies, at the beginning of the honey season, will give us the largest results. Most of us have the experience that a strong colony had collected 150 pounds or more of honey while the product of its next neighbor, a pretty strong colony also, was not more than 10 or 20 pounds. The difference in the strength of the colonies was the sole reason for the different results.

"What shall I do to coax my bees into the honey-chamber?" This innocent question has brought out a number of ridiculous answers. My answer would have been: Build your brood-chamber up by having it strong in brood and bees, and then pray for a yield of nectar. Without a strong colony there will be no crop, and unless the blossoms yield, there is no honey forthcoming. If we acquaint ourselves with the laws of nature, we shall not commit the folly of "coaxing."

The largest crop of honey being our object, we want a large brood-chamber the capacity of which accommodates the laying capacity of a good prolific queen as near as this is possible. We want a large surface above the brood-chamber, for we know that bees store most readily their honey above their brood. The 10-frame Langstroth hive suits me best, as it affords room enough for most prolific queens, providing we manage to have the 10 frames filled with brood. All frames filled partly with brood and honey should make room, in due time, for empty combs, and be used to strengthen weak colonies. Wishing to avoid all "coaxing," no honey-chamber is put on any one of my hives until the lower story has every comb filled with brood. Exceptions are indulged in only during poor seasons when we have to save our combs

from the moth, and "coaxing" is out of the question.

It being my object to get my colonies strong as early in the spring as possible, they were overhauled in March or early in April, and all colonies confined to as many combs as each one could well cover. As long as the weather is cool, enough honey should be between their division-boards, so as to have it within easy reach. But combs with honey placed on the outside of division-boards when the weather becomes warm, answers every purpose, and are preferable as a stimulant for breeding up to all stimulative feeding of liquids. The division-boards should not touch the bottom by about $\frac{1}{2}$ inch, allowing the bees an easy passage to the other side. They should be spread in due time, and an empty comb inserted as the growth of the colony requires it. But—make haste slowly. Brood will chill in the combs during cold nights unless there are bees enough to cover it.

In order to be prosperous, bees should be crowded from the beginning of spring to the end of the honey season, and to know what is "crowded," without over-crowding, shows the standard of the bee-keeper. When the queen feels crowded for the want of room to deposit her eggs, she imparts the swarming impulse, and is among the first to leave the hive. If, however, the queen is ever so well accommodated by young queens hatching, and thereby making room for her, and yet the bees are crowded for the want of room to deposit honey, they create the swarming fever when the queen is one of the last leaving the hive. We know that all the honey gatherers except those in the field are gone with the swarm.

No honey will be collected for a week or two, and the honey-chamber should be placed on the new swarm as soon as hived. There is no excuse for a bee-keeper allowing a second and third swarm to issue, as it is an easy job to look over the brood-chamber on the tenth day, or earlier, and to make use of the surplus queen-cells or destroy them as the case may be.

Honey being the object, we make a mistake depending upon natural swarms for an increase, as we thereby deprive our colonies of their force of foragers during, perhaps, the best flow of honey; and if a bee-keeper does so, he shows a neglect, of which, I admit, any one of us may be guilty, or he betrays a lack of knowledge, or, perhaps, a fear of the "tail end" of the bee.

As stated above, I want a large hive and a large colony of bees. I make no early swarms, but equalize my colonies before the harvest commences, taking, however, no frames of brood and adhering bees from any colony until it is very strong, near the point of swarming, and no honey-chamber is put on until the 10 frames of the brood-chamber are filled with brood. If this equalizing cannot be done with every one of my colonies before the season opens, I leave those weak colonies to fill their side combs with honey until they can be ex-

changed for combs with brood from strong colonies, when *their* honey-chamber is put on also. We cannot prevent queens entirely from entering the upper story, but by an observance of the above, it is the exception rather than the rule to find combs filled with brood in the upper story. When producing extracted honey exclusively, brood in the upper story does not bother us any. When comb honey is produced, a zinc division-board will prove a pretty certain preventive.

When the combs of the upper story are filled with honey, I exchange them for empty ones, and whenever a comb with brood is found, it is placed on the left side in the honey-chamber. When done with all, and extracting is over, those hives having brood in the upper story, get another overhauling. When the number of brood-combs in any one honey-chamber indicate that the queen has been neglecting her business below, the brood-chamber is looked over, and combs with honey and bee-bread, if any there be, are exchanged for combs with brood from above. Otherwise those combs with brood and adhering bees are used to strengthen up weak colonies to form nuclei, or to make colonies by division. The parent colonies are thereby not deprived of any of their foragers, as all the old bees return. My colonies made by division consist of 20 combs, if possible, containing brood and honey and adhering bees. A queen-cell or queen is given them on the following day. If the latter is the case, the new colony needs a looking over in the course of a week, or earlier, as the case may be.

The same process is gone over in the same manner when the combs are filled again, and so on to the end of the season. The result is that old colonies and new swarms are alike well provided, and that the latter gave me as much honey as any, in proportion, and natural swarms have not bothered me any. The queens having had ample chance to deposit their eggs, contract their brood-nest with the close of the season, honey takes the place of brood in the side-combs, and if the necessary winter stores are not accumulating in the brood-chamber, it is accidental and caused by the season. Extracting is never done too closely, and honey enough is left in the upper story to give each colony its full supply, and to provide for an unexpected emergency the following spring. We never calculate these combs as part of the crop of the season, as we want our bees to be self-supporting if possible.

I do not want to winter my bees on sugar syrup, and I fail to see the advantage and the good policy in doing so. It is uncertain, of course, what the next winter may bring, but as far as wintering is concerned with pollen or without it, and with natural stores, I will run a race with any one of you syrup-feeders.

With the above method I verily believe that my bees, *not* my hives, have gathered as much honey as the

bees of any one of you. The interests of sugar refiners have not been benefited at the expense of bee-keepers; my neighbors do not suspicion me of producing honey from sugar syrup, and my labor has not been excessive, but has met all the requirements of my colonies. If labor and expense are worth any consideration, my apiary proves, in only a fair season, the most grateful of any of my investments.

Mr. Muth's essay was then discussed, especially the parts referring to the profits of the apiary as compared with other investments, and the spreading of the brood. Mr. Muth stated that in one of his apiaries in which he had 17 colonies in the spring, he had extracted three times, and had taken 2,600 pounds of honey. He said that this particular apiary paid better for the amount invested than did the 90-acre farm upon which the apiary was located. Mr. Muth also stated that he could easily dispose of all his crop of honey among his neighbors, at from 12 to 15 cents per pound.

Relating to the subject of spreading the brood, some thought it advisable if done at the proper time, and under the right conditions. Mr. A. I. Root said he believed that letting the colony alone would be just as well, and a great deal the easiest way. He also suggested that a very proper place to test and decide the advisability of spreading the brood would be in an apiary connected with a State Agricultural College, which every such college should have and sustain.

THE BEE OF AMERICA.

After a further exchange of ideas on the spreading of brood, the discussion passed on to the subject, "Has *Apis Americana* been reached?" It was thought that whether or not the bee of America had been reached, many had attained their *ideal bee*. Prof. McLain advised that in breeding if more attention were paid to the drones employed in the fertilization of the queens, far greater advancement could be made, and also more rapidly; that prepotency is on the side of the drone.

After some more discussion on the subject, Mr. Newman said:

Apis Americana, when translated, simply means the "Bee of America," and I am inclined to admit that some few Americans, by careful breeding and selection, have arrived at that degree of perfection which warrant them in claiming to possess their *ideal bee*—the "Bee of America." I have just visited the apiary of Mr. L. Reed, of Kent, O., and finding his apiary a model of perfection, examined his bees and their work, and I am satisfied that Mr. Reed has attained to his *ideal*. Mr. Benedict, one of the first breeders of bees in America, and the oldest member of this society now present, has attained his *ideal*, and has a frame of live bees with the queen here on exhibition. There are scores of others who *now have* "the Bee of America"—*Apis Americana*. In deciding the merits of our ideal

bee, five points are essential, and may be enumerated thus: The queen must be *prolific* in order to have the hive full of bees at the proper time to gather the harvest of honey when it comes; the bees must be *industrious*, to let nothing escape their vigorous search while gathering the nectar; they must be *docile*, to allow the apiculturist to manipulate them and the hive with ease and pleasure, in order to be profitable; they must be *hardy* and strong to endure the rapid changes in this very changeable climate; and they must be *beautiful* in order to secure the admiration of the fanciers of fine stock. These five points are all essential characteristics of *Apis Americana*! Yes, Mr. President, "our ideal bee" will be present at the very moment when the slumbering flower, under the penetrating dew, awakes to consciousness, and unfolds its buds to take in the first rays of the morning sun; and as so nicely pictured out by Brother Root in his A B C, our ideal bee will welcome "Old Sol" at the break of day, by dipping into that tiny fountain which distils the honey drop by drop, and with joy unbounded will bear away the sweet treasure to its cells of wax in its populous little home. The bee with these traits of character is well named *Apis Americana*—and some at least have arrived at that greatly-desired point in excellence in developing "the bee of the future."

The convention then adjourned until 7:30 p.m.

EVENING SESSION.

At 7:30 p.m. the convention was called to order by the President.

It was moved and adopted that the minutes of the present convention be printed in pamphlet form, under the same conditions as last year.

The committee on the President's annual address reported that they endorsed the President's recommendations referring to the Bee-Keepers' Union, but did not think favorably of publishing a bee-keepers' annual, of 300 or 400 pages, such as is published by agricultural and kindred societies. Accepted and adopted.

After discussing the two or three questions that had been handed in to be answered, the convention adjourned until 9 a.m. on Wednesday.

Local Convention Directory.

1886.	Time and place of Meeting.
Oct. 21.—Southern Illinois, at Benton, Ills.	F. H. Kennedy, Sec., DuQuoin, Ills.
Oct. 23.—Eureka Springs, at Eureka Springs, Ark.	Dr. S. S. Purcell, Sec., Eureka Spring, Ark.
Oct. 23.—Wabash County, at Wabash, Ind.	Aaron Singer, Sec., Wabash, Ind.
Oct. 27-29.—Western, at Kansas City, Mo.	P. Baldwin, Sec., Independence, Mo.
Nov. 24, 25.—Illinois Central, at Mt. Sterling, Ills.	J. M. Hambaugh, Sec., Spring, Ills.
Dec. 1, 2.—Michigan State, at Ypsilanti, Mich.	H. D. Cutting, Sec., Clinton, Mich.
1887.	
Jan. 12.—Nebraska State, at Lincoln, Nebr.	H. N. Patterson, Sec., Humboldt, Nebr.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.



Issued every Wednesday by
THOMAS G. NEWMAN & SON,
 PROPRIETORS.
923 & 925 WEST MADISON ST., CHICAGO, ILL.
 At One Dollar a Year.

ALFRED H. NEWMAN,
 BUSINESS MANAGER.

Special Notices.

To Correspondents. — It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

Dr. Miller's Book, "A Year Among the Bees," and the BEE JOURNAL for one year, we will club for \$1.50.

A New Crate to hold one dozen one-pound sections of honey.—It has a strip of glass on each side, to allow the honey to be seen. It is a light and attractive package. As it holds but one tier of sections, no damage from the drippings from an upper tier can occur. We can furnish the material, ready to nail, for 9 cts. per crate. Glass 1½c. per light, extra.

Yucca Brushes are employed for removing bees from the combs. They are a soft, vegetable fiber, and do not irritate the bees. As each separate fiber extends the whole length of the handle as well as the brush, they are almost indestructable. When they become sticky with honey, they can be washed, and when dry, are as good as ever. The low price at which they are sold, enables any bee-keeper to have six or more of them, so as to always have one handy. We can supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

Five Thousand new subscribers to the BEE JOURNAL is what we have made our calculations for; they will come in clubs between now and next spring. Installments are coming every day.

Sample Copies of the BEE JOURNAL will be sent FREE upon application. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office, or we will send them all to the agent.

Home Market for Honey.

To create Honey Markets in every village, town and city, wide-awake honey producers should get the Leaflets "Why Eat Honey" (only 50 cents per 100, or else the pamphlets on "Honey as Food and Medicine," and scatter them plentifully, and the result will be a DEMAND for all of their crops at remunerative prices. "Honey as Food and Medicine" are sold at the following prices:

Single copy, 5 cts.; per doz., 40 cts.; per hundred, \$2.50. Five hundred will be sent postpaid for \$10.00; or 1,000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc. (giving the name and address of the bee-keeper who scatters them).

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell almost any quantity of it.

System and Success.

All who intend to be systematic in their work in the apiary, should get a copy of the Apiary Register and commence to use it. The prices are reduced, as follows:

For 50 colonies (120 pages)	\$1.00
" 100 colonies (220 pages)	1.25
" 200 colonies (420 pages)	1.50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable.

Red Labels for one-pound pails of honey, size 3x4½ inches.—We have just gotten up a lot of these Labels, and can supply them at the following prices: 100 for \$1.00; 250 for \$1.50; 500 for \$2.00; 1,000 for \$3.00; all with name and address of apiarist printed on them—by mail, postpaid.

Sweet Clover, or *Melilotus Alba*, is almost the only resource for honey now, on account of the late severe July drought. If the seed is planted in September, it will come up this Fall and bloom next year, in its second season.

We have a large lot of this seed on hand, and offer it at the following Reduced Prices, by express or freight:

One pound	\$0.20
" peck—15 lbs	2.25
" bushel—60 lbs	7.00
" sack—80 lbs	8.00

It will pay to buy it by the sack and sell it again in smaller quantities.

If you want a chance to make some money, and provide pasture for the bees during the Fall months, this is your opportunity!

The Convention History of America and the AMERICAN BEE JOURNAL for one year, will be clubbed for \$1.15.

As there is Another firm in Chicago by the name of "Newman & Son," we wish our correspondents would write "American Bee Journal" on the envelope when writing to this office. Several letters of ours have already gone to the other firm (a commission house), causing vexatious delay and trouble.

Honey and Beeswax Market.

The following are our very latest quotations for honey and beeswax:

CHICAGO.

HONEY.—Receipts are liberal and prices very from 10@13c. per lb. for white in sections varying from 1 to 1½ and 1¾ lbs. Many sales of good white 1-lb. sections are made at 11c. Extracted is quiet and ranging from 10@11c. to 12@13c.

BEESWAX.—23@25c. R. A. BURNETT, Oct. 13. 161 South Water St.

NEW YORK.

HONEY.—We quote this year's crop as follows: Fancy white in 1-lb. sections, clean and new packages, 15@16c.; 2-lbs., 12@13c.; fair to good 1-lbs., 12@14c.; 2-lbs., 10@11c.; fancy buckwheat 1-lbs., 11@12c.; 2-lbs., 9@10c. White clover extracted in kegs and small barrels, 64@7c.; California extracted in 40-lb. cans, 5@5 1-2c.; California comb honey, 10@11c.

BEESWAX.—Prime yellow, 22@24c.

MCCAUL & HILDRETH BROS., 34 Hudson St.

BOSTON.

HONEY.—The demand has improved. We are selling one-pound packages of white clover honey at 14@15c.; 2-pounds at 13@14c.

BEESWAX.—25 cts. per lb.

BLAKE & RIPLEY, 57 Chatham Street.

DETROIT.

HONEY.—Best white in 1-lb. sections, 12@13c. dark, 10@11c., with a good supply in commission houses.

BEESWAX.—23c. Oct. 10. M. H. HUNT, Bell Branch, Mich.

CINCINNATI.

HONEY.—Demand is fair for choice comb in 2-lb. sections, which brings 12@15c. a pound in a jobbing way, according to quality and neatness of package. There is a fair retail and jobbing demand for extracted in square glass jars, while the order trade for dark grades from manufacturers is improving. Range of prices for extracted is 7c. per lb.

BEESWAX.—It is in good demand, and good yellow brings readily 20c.

Oct. 9. C. F. MUTH & SON, Freeman & Central Av.

CLEVELAND.

HONEY.—Choice new honey in 1-lb. sections selling at 14c.; 2-lbs., 12@13c. Old honey is very dull at 10@12c. Extracted, 6@7c.

BEESWAX.—25c.

A. C. KENDEL, 115 Ontario Street.

KANSAS CITY.

HONEY.—The market is good for all grades, and sales are large, while the supply is the same. Prices remain the same. One-pound sections, white clover, 13@14c.; dark 1-lbs., 11@12c.; 2-lbs., 11@12c.; dark 2-lbs., 9@10c.; 1½-lbs., light, 14@15c. Extracted white clover, 6@7c.; dark, 4@5c.; white sage, 5@5½c.

BEESWAX.—20@22c.

CLEMONS, CLOON & CO., cor. 4th & Walnut.

MILWAUKEE.

HONEY.—The market for honey of choice quality is firmer and we are trying to establish a higher range of values. We quote 1-lb. sections of white at 12@13c.; 2-lbs., 11@12c.; dark as wanted. Extracted, white, in half barrels and in kegs, 64@7c.; in tin packages, 7@7½c.; in barrels as to quality, 5@5½c.

BEESWAX.—No demand.

Oct. 2. A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO.

HONEY.—There is a firmer market for extracted, and especially for comb honey, as the value of the latter is rather small. Apiarists have sold what they were obliged to dispose of for payment of packages and labor, and they hold the balance back at higher prices. The demand is increasing, and we quote to ready takers, 40@42c. for choice extracted; 34@35c. for amber extracted; and 8@11c. for comb honey in 2-lb. sections; 12@13c. for 1-lb. sections.

BEESWAX.—It finds buyers at 20@23c.

Sep. 28. SCHACHT & LEMCKE, 122-124 Davis St.

HONEY.—Receipts are light and the market very quiet. We quote: White extracted, 40@42c. amber, 38@40c. Comb, 8@10c. for white.

BEESWAX.—19@22c.

O. B. SMITH & CO., 423 Front Street.

ST. LOUIS.

HONEY.—Choice comb, 10@12½c.; latter is for choice white clover. Strained, in barrels, 34@42c. Extra fancy of bright color and in small packages, 4@4½c. Advance on above prices. Extracted in barrels, 4@4½c.; in cans 6@7c.

BEESWAX.—Dull at 21c. for prime.

Sep. 30. D. G. TUTT & CO., Commercial St.

Advertisements.

WANTED, an active, reliable man in every city and town in the State of Illinois to work up Councils of the American Legion of Honey, an insurance organization now having 60,000 members, and we are willing to pay liberally in cash for services rendered in this work. It can be performed at odd and leisure hours without interference with regular business, and is an occupation affording much pleasure to those engaged in it. For full explanation how to go to work and what to do, address

THOMAS G. NEWMAN,
925 West Madison St., CHICAGO, ILLS.

UNTESTED Queens at 50 cents.—Address, U.O. Kleinow, Opp. Ft. Wayne Gate, Detroit, Mich. 42A1t

FOR SALE.—Mammoth Red Clover and Alsike Seed. Having just finished up threshing, we offer 100 Bushels of the above. For prices address,

42A1t **J. B. MURRAY, ADA, O.**

THE CHAPMAN HONEY-PLANT.

In accordance with a previous notice in bee-periodicals, I am now prepared to fill orders for the seed of the above plant at the following prices: $\frac{1}{4}$ ounce, \$1; 1 oz., \$2; 2 oz., \$3; 4 oz., \$5; and 1 lb., \$8. One ounce contains from 1,600 to 1,800 seeds. On account of extreme drought my stock of seed is limited and persons ordering will be served in rotation. The seed should be sown in early spring and general directions for cultivation will be given on each package.

This plant is not an obnoxious weed, but is as easily eradicated as clover. Having carefully watched its habits of growth and its honey-producing qualities for the past six years I believe those who commence its cultivation in a liberal way will be better pleased than by commencing with a small quantity of seed. It has been tested by prominent bee-keepers all the way from Vermont to Nebraska and Ontario. We refer to the report of the committee appointed by the North American Bee-Keepers' Society held at Detroit in 1885. The committee reported at the Indianapolis Ind. convention held Oct. 12-14, and their report will be found in all bee-papers publishing the report of that convention.

Write all orders plainly and give your post-office address in full.

H. CHAPMAN,

42A1t VERSAILLES, Cattaraugus Co., N. Y.

HOW to WINTER BEES.

See pages 525, 543, 558, 574, 590, 606, 621, and 637, of the American Bee Journal. 41A1t

Honey For Sale.

We have a large quantity of the best white EXTRACTED HONEY, in 200-lb. Kegs, for sale, which we will deliver on board the cars at 8 cents per pound. Orders solicited.

THOS. G. NEWMAN & SON,
923 & 925 West Madison St., CHICAGO, ILL.

Vandervort Comb Fdn. Mills,

Send for Samples & Reduced Price-List.

Atf **J. VANDERVORT, Laceyville, Pa.**

THE AMERICAN APICULTURIST

WILL be sent one year and a copy of the 3rd Edition of the Bee-Keepers' Handy-Book, on receipt of \$1.50. The book contains 300 pages and 100 fine illustrations.

HENRY ALLEY,
41A1t WENHAM, MASS.

Vandervort Foundation Mill.

6 Inch, Price, \$20.00.
It makes the finest extra thin Foundation for
honey. For Sale by

THOS. G. NEWMAN & SON,
923 & 925 West Madison Street, CHICAGO, ILL.

The NEW Heddon Hive.

We have made arrangements with the inventor by which we shall make and sell the Heddon Reversible Hive, both at wholesale and retail; nailed and also in the flat.



The engraving gives a good idea of the hive. The brood-chamber is in two sections: also the surplus arrangement, which may be interchanged or inverted at will. The cover, bottom-board, and top and bottom of each sectional case has one-half of a regular bee-space, so that the surplus cases with the sections, may be placed between the two brood-chambers, or the latter may be transposed or inverted—in fact, all parts of this hive are perfectly interchangeable. The brood-frames will all be bored for wires.

A SAMPLE HIVE includes the bottom-board and stand, a slatted honey-board, and cover; two 6-inch brood-chambers, each containing 8 frames; two surplus arrangements, each containing 28 one-pound sections, one with wide frames and separators, and the other without separators. This latter chamber can be interchanged with the other stories, but cannot be reversed. It is NAILED AND PAINTED, and ready for immediate use. Price, \$4.00, complete.

It is absolutely essential to order one nailed hive as a pattern for putting those in the flat together correctly.

HIVES READY TO NAIL.—In filling orders for these hives, in the flat, we make 6 different combinations, so that our customers may make a selection from the sample nailed hive, without waiting for us to quote prices, and the different kinds will be known by the following numbers:

No. 1 consists of the stand, bottom-board, cover, two 6-inch brood-chambers, 16 frames, and the slatted honey-board. Price, \$1.55 each.

No. 2 is in the same as No. 1, with the addition of one surplus story containing 28 sections without separators—interchangeable, but not reversible. Price, \$2.00 each.

No. 3 is in the same as No. 2, with two surplus stories as therein described. Price, \$2.50 each.

No. 4 is in the same as No. 1, with the addition of one surplus story containing 28 sections in wide frames with separators, which can be reversed, inverted, and interchanged, the same as the brood-chambers. Price, \$2.30 each.

No. 5 is in the same as No. 4, with two surplus arrangements as therein described. Price, \$3.00.

No. 6 contains all the parts as described in the sample nailed hive. Price, \$2.75 each.

Those desiring the hives without the stand, honey-board or sections, may make the following deductions from the above prices: Stand, 14 cents; honey-board, 8 cents; and the 28 or 56 sections, as the case may be, at $\frac{1}{4}$ cent each, respectively.

We will also make the following deductions on quantities ordered all at one time: For 10 or more hives, 5 per cent. discount; for 25 or more hives 7 1/2 per cent.; for 50 or more, 10 per cent.

THOMAS G. NEWMAN & SON,
923 & 925 West Madison St., CHICAGO, ILL.

FLAT-BOTTOM COMB FOUNDATION.

high side-walls, 4 to 16 square feet to the pound. Circular and samples free.

J. VAN DEUSEN & SONS,
Sole Manufacturers,
Sprout Brook, Mont. Co., N. Y.

THE WESTERN WORLD
GUIDE and HAND-BOOK

OF USEFUL INFORMATION.

For HOME SEEKERS or Tourists, Capitalists or Laborers. A vast amount of information not to be found elsewhere at any price.

A cloth-bound book, 4x7 inches, 288 pages
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The following is only a part of the Contents:

Colored Maps of all the States and Territories, including Alaska and District of Columbia.

Diagrams showing area, population, products, Government, State, School and Indian Lands of the several States.

Histories of each of the States from the Earliest Times.

How to Acquire Lands of any kind belonging to the Government by any forms of entry who may acquire them, and the different laws applicable to the different sections.

Postal, Pension and Patent Laws of the United States.

Coats-of-Arms of the States and Views of Celebrated Places, and of life in different regions.

Rules for measuring Lumber, Logs, Grain Liquids, Tables of Weights and Measures of all kinds, Interest Rules and Tables, Lumber Tables.

Systems of Land Measures in various parts of the United States.

Contains also a Million Useful Facts.

The Weekly Bee Journal, for one year, and the Guide, postpaid, for \$1.30.

THOS. G. NEWMAN & SON,
923 & 925 West Madison St., CHICAGO, ILL.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

BEE-KEEPERS' GUIDE;
OR, MANUAL OF THE APIARY.

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